# PUGET SOUND VITAL SIGNS

# VITAL SIGN LAND COVER AND DEVELOPMENT

The Land Development and Cover Vital Sign measures the conversion of land from forests, farms, and natural areas into land for homes, businesses, and roads. During the past 150 years, Puget Sound lost at least two-thirds of its remaining old growth forest, more than 90 percent of its native prairies, and 80 percent of its marshes. With an estimated 1.5 million additional residents expected in the Puget Sound area by 2050, the need for housing and commercial development and the network of infrastructure (roads and utilities) to serve such development must be balanced with protection of the important functions provided by forested and riparian areas as well as agricultural lands. This Vital Sign tells us about the gains (through restoration), maintenance (through protection) and losses of habitat (through development), and also how well the region's ongoing human growth is being directed to protect the best remaining natural areas and working forests.

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#### **Last Updated**

3/11/2020

VITAL SIGN > INDICATOR	PROGRESS	STATUS
Land Cover and Development		
Rate of forest cover loss to development	GETTING BETTER	NEAR OR AT 2020 TARGET
Riparian restoration	GETTING BETTER	BELOW 2020 TARGET
Conversion of ecologically important lands	GETTING BETTER	NEAR OR AT 2020 TARGET
Growth in Urban Growth Areas	INSUFFICIENT OR NO DATA	BELOW 2020 TARGET

# **Key Messages**

- A collaboration of federal, state, and local governments, tribes, local recovery
  groups, nonprofits, and the private sector worked together to develop an
  Implementation Strategy of the best approaches to achieve recovery targets for the
  Land Development and Cover Vital Sign. The primary goal of the Implementation
  Strategy is to identify and protect the lands that are considered "ecologically
  important lands". Other strategies focus on directing development and population
  growth towards preferred growth areas by making it more cost effective and
  desirable to live in compact urban areas, and preserving farm lands for the
  production of local foods and to help keep farming economically viable.
- Lands that are highly significant or integral to hydrological dynamics, habitat quality, or biodiversity are identified as ecologically important. Over 80 percent of the entire Puget Sound land area is identified as having high ecological importance.



Land development in Puget Sound.

- The conversion of ecologically important lands indicator provides a regional
  measure of the effectiveness of local jurisdictions to direct growth away from undeveloped ecologically functional areas. The indicator focuses
  on ecologically important lands that are most vulnerable to development based on land ownership, comprehensive plan designations, and
  land cover and land use data.
- Nearly 1.1 million acres, or 13 percent of the entire Puget Sound land area, are identified as both ecologically important and under high
  pressure for conversion to development. Tracking the conversion rate of these lands from vegetation cover to developed cover initially showed
  an alarming increase from 0.28 percent over the 2001-2006 time period to 0.36 percent over the 2006-2011 time period. However, the conversion
  rate declined to 0.18 percent (conversion of nearly 2,000 of the 1.1 million acres) over the 2011-2016 time period, nearing the recovery target rate
  of not exceeding 0.15 percent. While these rates are low, representing a fraction of 1 percent of the indicator land base, they still represent the
  conversion of thousands of acres of ecologically important lands.
- Overall, the area converted to developed cover was down in lands of both high and low ecological importance over the 2011-2016 time period.
  However, the combined proportion of development in ecologically important lands with high and low pressure rose from 31 percent during the
  2006-2011 period to 41 percent during the 2011-2016 period. This analysis suggests that while the majority of development is being directed
  toward lands of low ecological importance (59 percent), ecologically important lands are experiencing increased pressure to accommodate
  more of the region's development.
- In Puget Sound, forest cover is declining, but the rate of that loss has slowed. Over the 2011-2016 time period, the rate of forest cover loss to development decreased below the recovery target value of not exceeding 1,000 acres per year, to 836 acres per year.
- Urban growth areas (UGAs) are regional boundaries designated for high-density urbanization with the intent to control urban sprawl and
  protect remaining natural areas and working lands. Population data, based on 2010 U.S. Census data, showed 83 percent of new population
  growth in the Puget Sound region occurred within UGAs from 2000 to 2010. However, the proportion of growth occurring within UGAs varied
  greatly for individual counties, ranging from 28 percent in Jefferson and Mason Counties, to 100 percent in King County.
- Central urban centers such as Seattle, Bellevue and Tacoma are experiencing rapid growth. According to the Department of Commerce, as of 2017, less than 10 percent of growth in the Puget Sound region occurred in rural areas over the past few years. However, as growth continues to increase, there are indications of growing development pressure in rural areas close to urban growth boundaries.

# Strategies, Actions, And Effectiveness

- · Land Development and Cover Implementation Strategy
- Managing our region's growth while protecting the highest quality remaining natural areas and working forests is a priority focus area (Land Cover and Development) for the Partnership's 2018 Action Agenda (scroll to the bottom of the page to view and download activities in the 2018 Action Agenda).
- Restoration and protection projects funded by the National Estuary Program that are associated with the Land Cover and Development Vital Sign (in the Puget Sound Info National Estuary Atlas)
- · What's working to restore Puget Sound? View effectiveness fact sheets for restoration and protection activities.

## **Background Documents**

- Leadership Council Resolution 2011-21, Adopting a 2020 ecosystem recovery target for land cover (forest loss and riparian restoration)
- Leadership Council Resolution 2011-22, Adopting a 2020 ecosystem recovery target for land development (ecologically important areas)
- Leadership Council Resolution 2011-23, Adopting a 2020 ecosystem recovery target for land development (urban growth areas)
- Leadership Council Resolution 2011-24, Adopting a 2020 ecosystem recovery target for land development (compact growth)
- Setting Targets for Ecosystem Condition and Pressure Reductions (Sep 2011 revised version) Technical Memorandum

### **Other Resources**

- Puget Sound Mapping Project Washington State Department of Commerce
- State of our Watersheds Report by the Northwest Indian Fisheries Commission
- Articles related to terrestrial habitat in the Encyclopedia Of Puget Sound

#### **Contributing Partners**

